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10/574,433	04/03/2006	Neil C. Bird	GB030177US1	9694

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EXAMINER

PATEL, MUNJALKUMAR C

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2617

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/574,433	Applicant(s) BIRD ET AL.	
	Examiner Munjal Patel	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 February 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-17 and 19-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 4-17, 19-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant has added claims 19-27, the examiner acknowledges it.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. **Claims 1, 6, 8-10, 22-24, 27** are rejected under 35 U.S.C. 102(e) as being anticipated by **Libes (US PG PUB # US 2003/0162556 A1)** herein after referred as **Libes**.

3. **Regarding claim 1, Libes** discloses a method and system for communication between two wireless enabled devices that reads on a method of configuring a radio link between a first device and a second device (**Libes: paragraph 31, line 1**), each of the first device and the second device comprises radio means (**Libes: paragraph 31, line 2**), and wherein at least one of the first device and the second device comprises proximity detection means (**Libes: Fig 1-3: device 2 & 4, paragraph 0032 lines [11-13]**) and timing means, wherein said method comprises the acts of:

detecting proximity between the first device and the second device when the first device and the second device are within a predetermined distance of each other (**Libes:**

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Fig 9 & paragraph 37, line [1-8] discloses the magnet and detector are specified for proximity detection, paragraph 48 and figures 23 and 24 discuss proximity timing intervals),

detecting a duration of the proximity of the first device and the second device to each other, and establishing the link in response to the duration exceeding a predetermined duration and the link is not already established (**Libes: Fig 23 discloses listening for N milliseconds with $250 < N < 350$ and creating a connection, hence detecting a duration of proximity & establishing link based on N).**

4. **Regarding claim 6, Libes** discloses the method as claimed in claim 1, further comprising the act of exchanging identifiers of the first device and the second device, wherein said identifiers are pre-installed radio identifiers (**Libes: paragraph 32: lines [14-17] discloses transferred information includes security key or manufacturers' information).**

5. **Regarding claim 8, Libes** discloses the method as claimed in claim 1, further comprising the act of indicating a configuration status of the link (**Libes: paragraph 45, lines[20-22]).**

6. **Regarding claim 9, Libes** discloses a system having devices including a first radio device and a second radio device comprising radio means operable to communicate via a configurable radio link there between (**Libes: paragraph 31), and**

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wherein at least one of said devices comprises proximity detection means for detecting proximity between the first radio device and the second radio device when said devices are within a predetermined distance of each other, and timing means for detecting duration of said proximity (**Libes: Fig 23, 24 & paragraph 48 disclose listening for N milliseconds with $250 < N < 350$ and creating a connection, hence detecting a duration of proximity & establishing link based on N**), and wherein said radio means (**Libes: Fig 23**) establish the radio link in response to the duration exceeding a predetermined duration and the radio link is not already established.

7. **Regarding claim 10, Libes** discloses the system as claimed in claim 9, wherein said first and second device are adapted to physically connect with respective host apparatus (**Libes: Fig 4: “mechanical components that physically interlock**) and wherein said apparatus communicate with one another via said configurable radio link (**Libes: paragraph 32 & Fig 1**).

8. **Regarding claim 22, Libes** discloses a method of configuring a radio link between a first device and a second device comprising the acts of: detecting proximity between the first device and the second device when the first device and the second device are within a predetermined distance of each other (**Libes: Fig 9 & paragraph 37, line [1-8] discloses the magnet and detector are specified for proximity detection, paragraph 48 and figures 23 and 24 discuss proximity timing intervals**);

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detecting a duration of the proximity of the first device and the second device to each other; and establishing the radio link in response to the duration exceeding a predetermined duration (**Libes: Fig 23 discloses listening for N milliseconds with $250 < N < 350$ and creating a connection, hence detecting a duration of proximity & establishing link based on N**).

9. **Regarding claim 23, Libes** discloses a system comprising: a first device (**Libes: Fig 3:A**); and a second device (**Libes: Fig 3:B**) for communicating with the first device via a radio link (**Libes: Fig 3:12 discloses device A communicating to device B**);

wherein at least one of the first device and the second device comprises :

a proximity detector configured to detect proximity between the first device and the second device when the first device and the second device are within a predetermined distance of each other (**Libes: Fig 9 & paragraph 37, line [1-8] discloses the magnet and detector are specified for proximity detection, hence proximity detector**); and

a timer configured to detect duration of the proximity (**Libes: paragraph 48 & fig: 23, 24 discuss proximity timing intervals, hence presence of timer**);

wherein the radio link is established in response to the duration exceeding a predetermined duration (**Libes: Fig 23**).

10. **Regarding claim 24, Libes** discloses a radio device operable to communicate via a radio link with a further device, the radio device comprising:

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a proximity detector configured to detect proximity between the radio device and the further device when the radio device and the further device are within a predetermined distance of each other (**Libes: Fig 9 & paragraph 37, line [1-8] discloses the magnet and detector are specified for proximity detection, hence presence of proximity detector**);

a timer configured to detect duration of the proximity (**Libes: paragraph 48 and fig:23, 24 discuss proximity timing intervals, hence presence of timer**); and

a transceiver for establishing the radio link in response to the duration exceeding a predetermined duration (**Libes: paragraph 32 lines [11-14] disclose transfer of handshaking data hence presence of transceiver, further paragraph 48 and fig:23, 24 discuss listening for N milliseconds with $250 < N < 350$, hence decision is based on value of N**).

11. **Regarding claim 27, Libes** discloses the radio device of claim 24, wherein the proximity detector comprises a reed switch and magnet (**Libes: paragraph 38 and figure 10, item 404**), the reed switch being activated by a further magnet of the further device with the further device is within the predetermined distance (**Libes: Fig 1-3: device 2 & 4, paragraph 0032 lines [11-13]**), wherein the reed switch is connected to the timer for determination of duration of activation of the reed switch and establishment of the radio link in response to the duration of activation exceeding the predetermined duration (**Libes: Fig 23 discloses listening for N milliseconds with $250 < N < 350$ and**

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creating a connection, detecting a duration of proximity & establishing link based on N, hence there is a connection between reed switch and the timer).

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

14. **Claims 4-5, 25-26** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Libes**.

15. **Regarding claim 4, Libes** discloses the method as claimed in claim 1, wherein said predetermined duration is between substantially two and ten seconds (**Libes: Figures 23 and 24 range from 100-350 milliseconds, which is less than 10 second, however it is a design choice of applicant to have that range between 2**

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and 10 second, which is not patentable). This claim is rejected for the motivation of providing more time to confirm trigger of radio link.

16. **Regarding claim 5, Libes** discloses the method as claimed in claim 1, wherein said predetermined duration is about 2 seconds. **(Libes: Figures 23 and 24 range from 100-350 milliseconds, however it is a design choice of applicant to have that range about 2 second, which is not patentable)** Being adjustable these timer intervals also anticipate the larger interval of 2 seconds. This claim is rejected for the motivation of providing more time to confirm trigger of radio link.

17. **Regarding claim 25, Libes** discloses the radio device of claim 24, wherein the proximity detector comprises a reed switch and magnet, the reed switch being positioned substantially perpendicular to magnetic field lines emanating from the magnet, wherein the magnet has insufficient field strength to operate the reed switch so that the reed switch is not operated by the magnetic field lines substantially perpendicular to the reed switch. It is obvious to one ordinary skilled in art to selecting the physical and magnetic orientations in mounting the magnet and reed relay switch. This claim is rejected for the motivation of using magnet property to activate/de-activate switch.

18. **Regarding claim 26, Libes** discloses the radio device of claim 24, wherein the proximity detector comprises a reed switch and magnet, the magnet having sufficient

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field strength to operate the reed switch, wherein the reed switch is positioned substantially parallel to magnetic field lines emanating from the magnet so that the reed switch is not operated by the magnetic field lines substantially parallel to the reed switch. It is obvious to one ordinary skilled in art to selecting the physical and magnetic orientations in mounting the magnet and reed relay switch. This claim is rejected for the motivation of using magnet property to activate/de-activate switch.

19. **Claims 11- 17, 19-21** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Libes** as applied to claims above, and in view of **Sako et al.(US Patent # US 6,980,083 B2)** herein after referred as **Sako**.

20. **Regarding claim 11, Libes** discloses a radio device operable to communicate via a configurable radio link with a further device (**Libes: paragraph 31**), the radio device comprising proximity detection means for detecting proximity between the radio device and the further device when the radio device and the further device are within a predetermined distance of each other (**Libes: Fig 1-3: device 2 & 4, paragraph 0032 lines [11-13]**), timing means for detecting duration of said proximity (**Libes: figures 23 and 24 and paragraph 37**), and radio means for establishing the radio link in response to the duration exceeding a predetermined duration (**Libes: Fig 23 disclose listening for N milliseconds with $250 < N < 350$ and creating a connection, hence detecting a duration of proximity & establishing link based on N**) and the radio link is not already established. **However, Libes** fails to specifically disclose the radio links is not

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already established, **however** the examiner maintains that it was well known in the art to provide the radio link is not already established as taught by **Sako (Sako: Fig11: S25 & column 9 lines 1-11)**.

21. In a similar field of endeavor **Sako** discloses Radio communication system apparatus and method. In addition **Sako** discloses the radio link is not already established.

22. **Therefore**, it would have been obvious to one of ordinary skill in that art at the time the invention was made to modify **Libes** by specifically providing the radio link is not already established as taught by **Sako** for the purpose of saving power in portable device (**Sako: column 1 lines [62-65]**).

23. **Regarding claim 12, Libes** in view of **Sako** discloses the radio device as claimed in claim 11, wherein said proximity detection means comprises a reed switch and magnet (**Libes: paragraph 38 and figure 10, item 404**). This claim is rejected for the same motivation as claim 11.

24. **Regarding claim 13, Libes** in view of **Sako** discloses the radio device as claimed in claim 12, wherein said magnet has insufficient field strength to operate said reed switch and wherein said switch and magnet are arranged such that some of the magnetic field lines emanating from the magnet are perpendicular to the direction in which the switch closes. It is obvious to one ordinary skilled in art to selecting the

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physical and magnetic orientations in mounting the magnet and reed relay switch. This claim is rejected for the same motivation as claim 12.

25. **Regarding claim 14, Libes** in view of **Sako** discloses the radio device as claimed in claim 12, wherein said magnet has sufficient field strength to operate said reed switch, and wherein said reed switch and magnet are arranged such that the magnetic field lines emanating from the magnet are substantially parallel to the direction in which the switch closes, this claim is rejected is for the same motivation as claim 12.

26. **Regarding claim 15, Libes** in view of **Sako** discloses the radio device as claimed in claim 13, wherein said timing means comprises a micro-controller connected with said proximity detection means. This claim is rejected for the same motivation as claims 13 additionally because It is obvious to one ordinary skilled in art to have a micro-controller for implementing a communication device (**Libes: paragraph 47 and 48**).

27. **Regarding claim 16, Libes** in view of **Sako** discloses the radio device as claimed in claim 15, wherein said radio means comprises a digital transceiver controlled by said micro-controller. This claim is rejected for the same motivation as claim 15 additionally because It is obvious to one ordinary skilled in art to have a digital transceiver for implementing a communication device (**Libes: paragraph 48: 'individual processing system for wireless handshaking'**).

28. **Regarding claim 17, Libes** in view of **Sako** discloses the radio device as claimed in claim 11, the device being further adapted to physically connect with a host apparatus and provide and receive data to and from said host apparatus. Claim 17 is rejected for the same motivation as claim 11 in addition (**Libes: paragraph 41, lines [1]**), and provide and receive data to and from said host apparatus along with **Libes: paragraph 41, lines [2-6]**).

29. **Regarding claim 19, Libes** discloses the method of claim 1, further comprising the act of removing the link if the link is already established. **However Libes** fails disclose removing the link if the link is already established. **However** the examiner maintains that it was well known in the art to provide removing the link if the link is already established as taught by Sako (**Sako: Fig 11 & column 9 lines [12-36] discloses method where it specifically checks if there is application ID present in the history mgmt table, if it is then it disconnects the link.**)

30. **In** a similar field of endeavor **Sako** discloses Radio communication system apparatus and method. In addition **Sako** discloses removing the link if the link is already established.

31. **Therefore**, it would have been obvious to one of ordinary skill in that art at the time the invention was made to modify **Libes** by specifically providing removing the link if the link is already established as taught by **Sako** for the purpose of saving power in portable device (**Sako: column 1 lines [62-65]**).

32. **Regarding claim 20, Libes** discloses the system of claim 9, wherein said radio means remove the radio link if the radio link is already established. **However Libes** fails disclose removing the link if the link is already established. **However** the examiner maintains that it was well known in the art to provide removing the link if the link is already established as taught by **Sako (Sako: Fig 11 & column 9 lines [12-36] discloses method where it specifically checks if there is application ID present in the history mgmt table, if it is then it disconnects the link.)**

33. In a similar field of endeavor **Sako** discloses Radio communication system apparatus and method. In addition **Sako** discloses removing the link if the link is already established.

34. **Therefore**, it would have been obvious to one of ordinary skill in that art at the time the invention was made to modify **Libes** by specifically providing removing the link if the link is already established as taught by **Sako** for the purpose of saving power in portable device **(Sako: column 1 lines [62-65])**.

35. **Regarding claim 21, Libes** discloses the system of claim 11, wherein said radio means remove the radio link if the radio link is already established. . **However Libes** fails disclose removing the link if the link is already established. **However** the examiner maintains that it was well known in the art to provide removing the link if the link is already established as taught by **Sako (Sako: Fig 11 & column 9 lines [12-36]**

discloses method where it specifically checks if there is application ID present in the history mgmt table, if it is then it disconnects the link.)

36. In a similar field of endeavor **Sako** discloses Radio communication system apparatus and method. In addition **Sako** discloses removing the link if the link is already established.

37. **Therefore**, it would have been obvious to one of ordinary skill in that art at the time the invention was made to modify **Libes** by specifically providing removing the link if the link is already established as taught by **Sako** for the purpose of saving power in portable device (**Sako: column 1 lines [62-65]**).

38. **Claim 7 is** rejected under 35 U.S.C 103(a) as being unpatentable over **Libes** in view of **O'Toole (US Patent # 6,130,602)** herein after referred as **O'Toole**.

1. **Regarding claim 7, Libes** in view of **O'Toole** discloses the method as claimed in claim 1, further comprising the act of exchanging identifiers of the first device and the second device (**Libes: paragraph 32: lines [14-17] discloses transferred information includes security key or manufacturers' information**), wherein said identifiers are randomly generated radio identifiers. **However, Libes** fails to specifically mention identifiers are randomly generated radio identifiers. **However**, the examiner maintains that it was well known in the to provide identifiers are randomly generated radio identifiers as disclosed by **O'toole (O'Toole: Col. 45 line [61] – Col 46 line [7]**

discloses “the interrogator 26 sends a command causing each device 12 of a potentially large number of responding devices 12 to select a random number”).

2. In similar endeavor **O'Toole** discloses establishing of said link comprises exchanging randomly generated radio identifiers. In addition, **O'toole** discloses identifiers are randomly generated radio identifiers.

39. **Therefore**, it would have been obvious for one of an ordinary skill in communications circuitry design to combine this random identifier scheme with **Libes**. **O'Toole's** rationale is to allow multiple RF tags to automatically arbitrate their identities while in a clustered situation with multiple possible responding devices by selecting uniquely random identifier numbers 'to select a random number from a known range and use it as that device's arbitration number'.

Response to Arguments

1. Applicant's arguments with respect to amended independent claims 1,9,11 filed on 02/12/2009 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

2. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Munjal Patel whose telephone number is (571)270-5541. The examiner can normally be reached on Monday - Friday 9:00 AM - 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rafael Perez-Gutierrez can be reached on 571-272-7915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information

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system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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